

Bite Registration

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- It is a record used to transfer the inter-occlusal relationship between the upper and lower teeth from the patient to the laboratory for orientation of the working cast on the articulator.

Materials Used

- Zinc oxide and eugenol impression paste
- Waxes
- Putty like elastomers
- Auto-polymerizing resins
- Impression Plaster
- Combination of above materials

Requirements of ideal material

- Records teeth morphology accurately
- Material should not displace the teeth, avoid mandibular abnormal movements during biting
- Dimensionally stable
- Rigid after setting
- Allows for checking of the occlusal record

Methods of Bite Registration

- Key point of occlusion

Before the bite is taken, the dentist picks a relationship between two or more opposing teeth. The patient is instructed to close in centric relation several times to get used to it.



Zinc Oxide & Eugenol

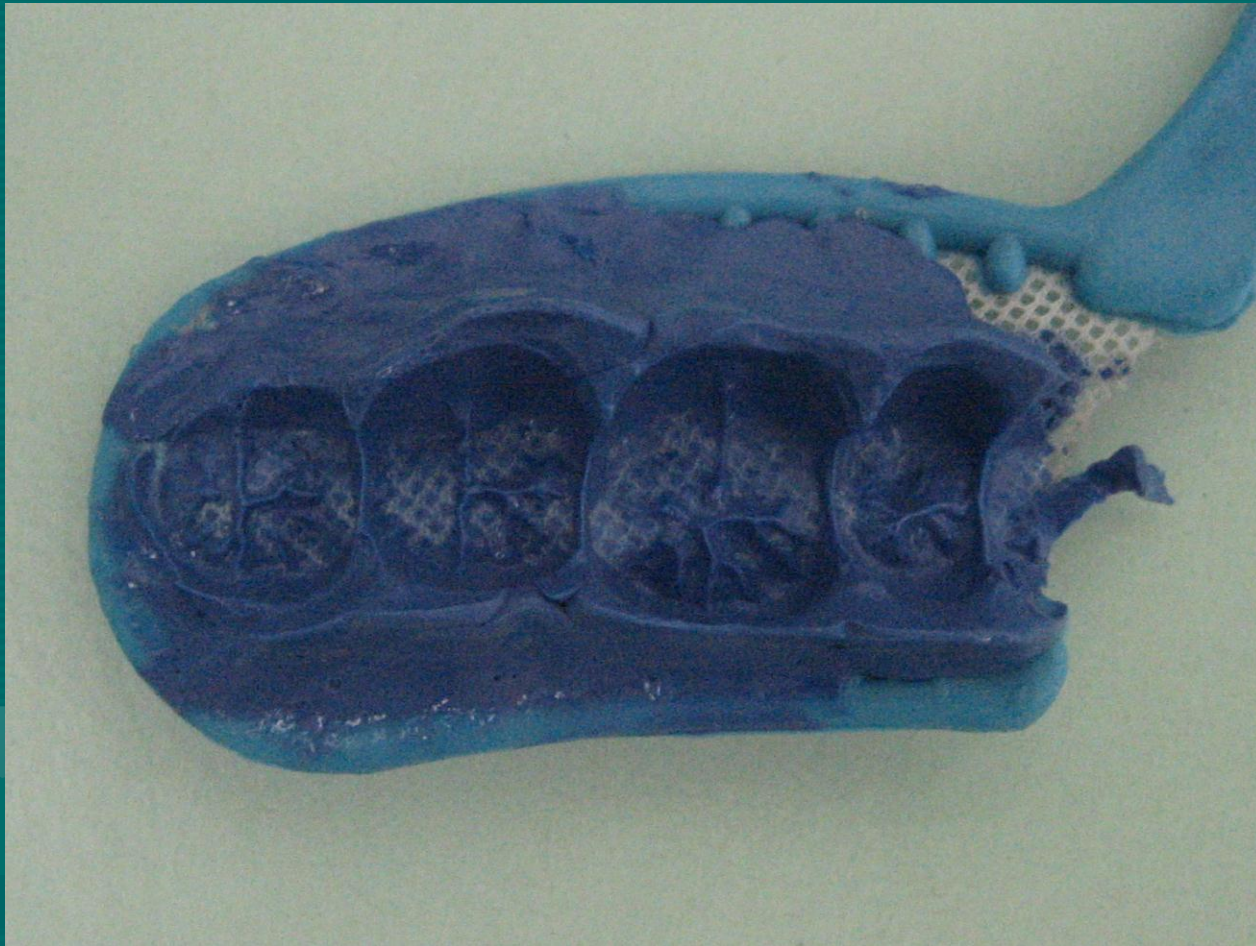
- It is considered a very acceptable and easy method of recording the bite. It uses a registration paste carried on a wire frame with a fiberglass mesh.
- It can be used for half or full arch
- Ready made (John's bite frame)
- Manually fabricated

Ready made bite frame



- Place ZnO & E paste on frame (2mm thick)
- Ask patient to bite in centric occlusion (after some training), check keys of occlusion
- Keep biting until set
- Remove and check for full penetration of cusps
- Remove any excess with a sharp blade
- Used for bite reg. , impr of opposing arch, transfer single die to removable die

Bite Frame with Low Viscosity Elastomeric Impr Material



Advantages

- Accurate details
- Dimensionally stable
- Rigid to compression during seating of models
- Reassembled easily if broken
- Can produce opposing occlusion
- Disadvantages: Non-elastic, sticky and messy
- Can use rubber base instead of ZnO & E

Waxes

- It is the simplest and most economic procedure of bite registration.
- Types : 1- Wax squash bite
2 - Wax bite rite
3 – Wax bite block

Wax Squash Bite

- Used in unilateral single restorations where is a sufficient amount of teeth in the dental arch for stability.
- 2 layers of base plate wax are used. This can be strengthened by a metallic foil, gauze or fiberglass.

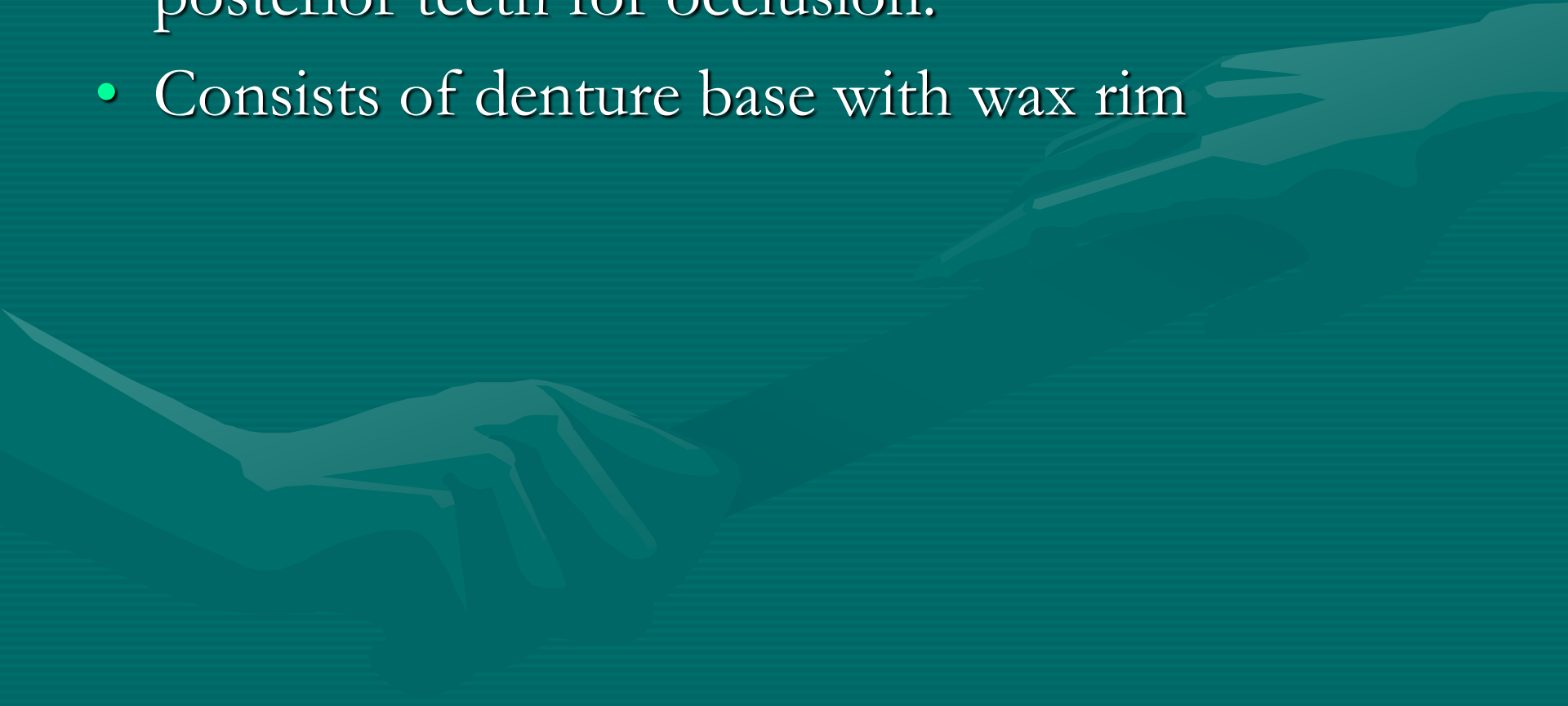


Wax Bite Rite

- Used when there is long edentulous span.
- Several layers of wax is used to form a horse shoe shaped block of wax.
- Molded on the outside by the dentist and inside by the patient's tongue.
- Molten inlay wax can be added to the prepared site for finer details.

Wax Bite Block

- Used when restoring anterior teeth where is no posterior teeth for occlusion.
- Consists of denture base with wax rim



- Advantages are that it is simple, quick and inexpensive.
- Disadvantages include:
 - not accurate
 - wax tends to spread out laterally during closing.
 - dimensional changes even at room temp.
 - texture of wax may guide the patient to abnormal closure.

Elastomers

- Poly-vinyl siloxane or polyether material are used.
- Recent procedures include a gun the mix the base and catalyst together, then places the material over the mandibular teeth. The material has a foamy consistency that prevent the patient from closing in an abnormal position.
- Triple tray technique uses a special disposable sectional tray to take the upper/lower impressions plus bite at the same time (Closed mouth technique).

